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PLANTAE NOVAE AFRICANAE.

“Ex Africa semper aliquid novi.”—*Pliny*.

SERIES XXV.

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Hypertelis trachysperma Adamson sp. nov. (Aizoaceae.)

Herba annua succulenta glabra purpurascens. *Caules* prostrati, usque ad 15 cm. longi. *Folia* teretia vel subtrigona, carnosae, saepe glaucae, 2—6 cm. longae, stipulis acuminatis. *Pedunculi* alterni, 3—4 cm. longi, foliis subaequilongi, 3—8-floriferi, pedicellis 3—9 mm. longis, apice incrassatis. *Tepala* carnosae, 2 mm. longae. *Stamina* 5, tepalis breviora, antheris rotundatis, filamentis tenuissimis. *Stigmata* 4 vel 5, saepissime 5, sessilia. *Capsula* subsphaerica, tepalis aequilonga. *Semina* reniformia, tuberculata.

At the margins of vleis on muddy soil. Fl. Feb.—Apl.

Hab. Cape Province. Cape Division: Zeekoe Vlei, Walgate 687 (*Type*, in Herb. Bolus): Kommetje Adamson (s.n.).

A larger plant than *H. arenicola* Sond., less glaucous and usually purplish, with larger leaves, stouter and longer peduncles, 5 stamens, 4 or 5 carpels, and tuberculate seeds. The stems are firmly pressed to the ground. The leaves on the main stem are subopposite and usually wither at the tip at flowering time, those on the branches are much shorter. The perianth segments are very thick,

Mezleria stenosphon Adamson sp. nov. (Campanulaceae.)

Perennis decumbens. *Folia* obovata vel spatulata obtusa vel subacuta apice remote dentata, inferiora conferta breviter petiolata, superiora sparsa sessilia angustiora. *Flores* rosei corymbosi. *Lobi corollae* aequilongi patentes tandem reflexi, tubus cylindricus longissimus sepalis multoties longior. *Stamina* erecta, exserta, antheris posterioribus glabris, anterioribus minoribus pilis albis et seta unica longa terminatis. *Ovarium* obconicum.



FIG. 1. *Hypertelis trachysperma*. 1. Shoot, nat. size. 2. Young inflorescence $\times 5$. 3. Flower, perianth removed $\times 5$. 4. L.S. flower $\times 5$. 5. Ripe seed $\times 5$.
Del. M. Walgate.

Stems 10—30 cm. long, ridged, glabrous, slightly woody at the base. *Leaves* 6—12 mm. long or rarely longer, 4—6 mm. wide. *Racemes* simple or compound, corymbose. *Pedicels* slender, 4—8 mm. long. *Corolla* rose-pink, the tube cylindrical, 1—1.5 cm. long, split to the base, the lobes equal, spreading, finally reflexed. *Anthers* dark blue or blue-black, glabrous, the anterior smaller and tipped with a tuft of white hairs and a single longer bristle, with minute membranous scales between the hair tufts. *Style* with a prominent ring below the small stigma.

Humus soils on the higher mountains. Fl. Jan.—Apl.

Hab. S.W. Cape : Upper Wellington Sneeuwkop, 5,500 ft. *Adamson* 3605 (type in Bolus Herb.) ; Mts. N. of Fransch Hoek Pass *Pillans* 6738 (as *Isolobus*) ; Sondereinde Mts. (A. Bolus) *Guthrie* 4570 ; E. of Kogelberg, *Stokoe* (s.n.).

In collections this has been assigned to *Isolobus* or even to *Laurentia* ; from either it is at once separated by the corolla and stamens.

The fresh material examined had flowers of a bright rose-pink ; *Pillans* notes the flowers as " purple ", *Guthrie* as " blue ". In the dried state there is no difference between these specimens.

***Prismatocarpus debilis* Adamson sp. nov. (Campanulaceae.)**

Perennis. *Caules* tenues, ramosi, decumbentes vel prostrati, hispidi. *Folia* subglabra, inferiora opposita, ovata ovato-elliptica vel etiam subrotunda, obtusa vel acuta, brevissime petiolata, remote dentata, superiora alterna, angustiora, minora. *Flores* solitarii vel pauci, distantes, pedunculis longis tenuibusque. *Corolla* campanulata, sepalis linearibus longior, tubo lobis duplo longiora. *Fructus* sulcatus, glaber.

A very slender diffuse perennial in loose tangles. *Stems* 10—20 cm. long. *Lower leaves* opposite, 4—6 mm. long, 2·5—4 mm. wide, the upper alternate, smaller and more distant. *Peduncles* very slender, with 1 or less often 2—4 distant flowers. *Corolla* white or pale blue, 5—7 mm. long, the lobes about half as long as the tube. *Fruit* 1·2—1·8 cm. long.

Sheltered rock crevices on the upper parts of the mountains. Fl. Dec.—Feb.

Hab. S.W. Cape : Genadendal Mountains : at 3,000 ft., *Bolus* 7305 (Type, in Bolus Herb.) ; at 4,800 ft., *Schlechter* 9882 ; at 3,000 ft., *Schlechter* 10298 ; *Stokoe* (s.n.). Wellington Mts. ; Observation Peak at 4,000 ft. *Esterhuysen* 1712 ; Upper Sneeuwkop at 4,500 ft., *Adamson* 3606.

This species was first collected in 1885 and recognised as distinct by Bolus in 1887 when he attached the name to specimens. No description was, however, published. His suggested name is that adopted and the first collected specimens are the type.

Specimens from the Genadendal mountains have leaves about twice as long as wide, whereas those from the Wellington mountains have wider leaves, about as wide as long.

There are in Herb. Bolus two specimens, *Schlechter* 9975 from Michell's Pass, and *Bolus* 8337 from Ceres, which resemble *P. debilis* but are of stouter more rigid plants with a more branched inflorescence. They are plants from lower altitudes, 2,000 ft. and 1,700 ft. respectively. Further collecting and field observation is needed before these plants can be definitely associated with or separated from *P. debilis*.

Croton steenkampiana Gerstner sp. nov. (Euphorbiaceae.)

Frutex 1—3 m. altus. Rami dense lepidoto-stellati, exstipulati. Folia cordata c. 5 cm—10 cm. longa et 3 cm.—6 cm. lata, integra, discolorissima, supra viridia et dispersite stellata, infra albis capillis stipitatis et stellatis tomentosa et basi glandulis 2 stipitatis ornata. Flores 6—15 in racemo monoecio. Pedicelli 3 mm.—5 mm. longi. Sepala triangularia 1.5 mm. $\times$ 3 mm. Petala nulla. Ovarium globosum, stellato-tomentosum. Styli 5 mm. longi, tres bis bifurcati. Fructus capsula trilocularis, seminibus tribus atris nitidis.



FIG. 2. *Croton steenkampiana*. 1. Flowering branch $\times \frac{1}{2}$. 2. Female flower, nat. size. 3. Stipitate stellate hair $\times 10$. 4. Young inflorescence. 5. Base of leaf from below, showing two glands. Del. F. J. Gerstner.

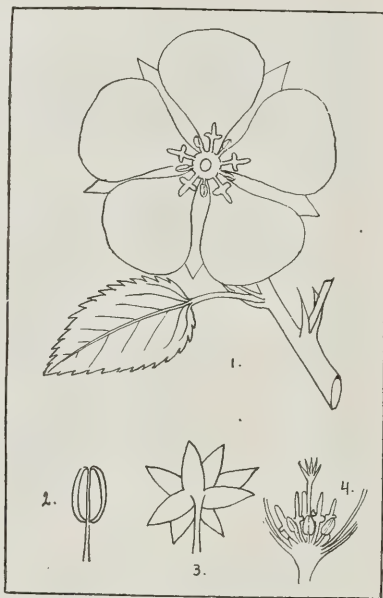


FIG. 3. *Melhania suluiensis*. 1. Flower and leaf. 2. Stamen. 3. Calyx and epicalyx. 4. Genitalia. 1, 3 and 4, nat. size; 2, $\times 6$. Del. F. J. Gerstner.

Hab. Zululand, District Hlabisa, at False Bay Bird Sanctuary. Gerstner 6128 et 6129. (National Herbarium et Kirstenbosch Herbarium.) It is named after Dr. L. Steenkamp, M.P. of Vryheid, in thankful acknowledgement of the interest and assistance which he gave me in my botanical research during the last two years.

The Zulu name is "iHubeshane", a name which is also used around uBombo for *Croton subgratissimus*. It is a shrub 1—3 m. high. The branches, leaves and ovary are covered with white stellate and stipitate hairs. The cordate leaves especially are densely tomentose and white beneath with these stellate hairs. The base of the leaves is furnished with the stipitate glands usually present in this genus and are 3- or 5-nerved. The racemes are monoecious and have 6—15 small flowers, the few female ones being always basal. The male flowers were unfortunately all dried up in consequence of the drought during the last two years. The female ones have no corolla. The five calyx-lobes are triangular and hairy. The 3 stigmas are twice bilobed. The fruit is a trilocular capsule with three black shiny seeds.

Melhaniasuluensis Gerstner sp. nov. (Sterculiaceae.)

Frutex 50—120 cm. altus, erectus, foliosus ubique tomentosus seu pilosus et multibrachiatus. *Folia* numerosa, alternata, stipulata, lanceolata, c. 22 mm. longa et 12 mm. lata, dentata, 3—5-nervata, concolorata infra superque, tomentosa, nervis inconspicuis immersis, petiolo 5—10 mm. longo. *Flores* solitarii, pedicelli c. 20 mm. longi. *Epicalyx* segmentis 3 lanceolatis. *Calicis segmenta* 5, c. 7 mm. longa, lanceolata. *Corolla* quinque foliis c. 10—18 mm. longis et latis, ovatis, citro-luteis ornata. *Stamina* 5 fertilia et 5 infertilia. *Stylus* c. 12 mm. longus, stigma 5-brachiata ornatus. *Capsula* 5-locularis intra glabra, extra pilosa noma glabrescens. *Semina* 5, atra.

Hab. Zululand. Very frequent around the Dhlangubo Store half-way between Eshowe and Empangeni: found throughout the Umhlatuzi Bushveld. Gerstner 2888. (Durban Herbarium and Bolus Herbarium.) Flowered 15/9/36. This multibranched and rather woody shrublet is usually about 1 m. high and has very attractive lemon-yellow single flowers. The Zulus call it, as they do in the case of *Sida* and all malvaceous flowers, "uVemvane", the "Butterfly", on account of its quickly-fading nature. The serrate leaves are about 20 mm. long and 12 mm. broad, tomentose and greyish-green on both sides. The veinlets are sunk in the velvet surface and therefore scarcely visible. The petiole is about 5—10 mm. long. The flowers are usually single, the pedicels about 20 mm. long. The epicalyx has three lanceolate lobes, the calyx 5 similar ones. The 5 corolla leaves are ovate and about 10—18 mm. long and broad. The fruit, a 5-locular capsule, has 5 black seeds and is glabrous inside and hairy outside.

Grubbiagracilis Salter sp. nov. (Grubbiaceae.)

G. rosmarinifoliae affinis, sed ita differt:—*Fruticulus* minor, gracilior, 30—50 cm. altus. *Folia* anguste obcuneata, 4—6 mm. longa, valde

revoluta, basi subsagittata, lobis obtusis petiolo fere in longitudine aequantibus. *Bracteae* quarta pars bilobatae. *Filamenta* 0.5—0.7 mm. longa, subsigmoidea, basin versus ampliata, minute puberula.

A slender diffusely branched shrublet, 30—50 cm. high, the stem terete, striate, with tufts of hairs at the nodes. *Branches* downy, the ultimate branchlets hirsute. *Leaves* opposite, patent, at length reflexed, narrow-obcuneate to almost linear, but always tapering to the apex, 4—6 mm. long, 0.6—2 mm. broad, scabrid and pubescent when young but soon glabrescent above, strongly revolute, tomentose beneath, subsagittate at the base, the lobes obtuse, nearly as long as the petiole : petiole about 1 mm. long, hirsute. *Cymules* sessile, axillary, about 2 mm. long, 3- or rarely 2-flowered. *Bracts* $\frac{1}{4}$ -bilobed, keeled, membranous, chestnut-brown, 1.4—1.6 mm. long, 2—2.4 mm. broad, the

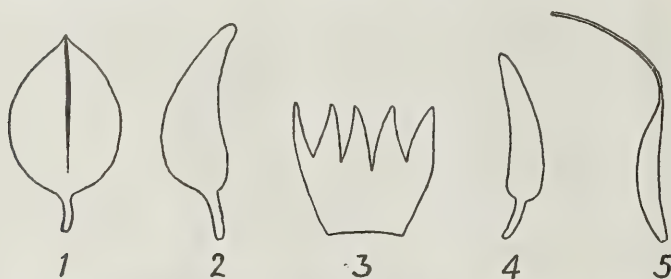


FIG. 4. *Rafnia ericifolia* Salter. 1. Vexillum $\times 3$. 2. Carina $\times 3$. 3. Calyx, flattened $\times 3$. 4. Ala $\times 3$. 5. Ovary and style $\times 4$. (Salter 6567.) Del. T. M. Salter.

lobes very obtuse. *Flowers* closely pressed together. *Perianth* segments oval, convex, about 1 mm. long, incurved at the apex, the margins thickened, with 2 small swellings at the base : dorsal hairs white, about half as long as the segments. *Filaments* slightly sigmoid, swollen at the base, minutely puberulous : anthers 0.3 mm. long. *Ovary* 1-chambered, hirsute, with 2 pendulous ovules. *Style* filiform, 0.4 mm. long, enveloped in a dense tuft of disc-hairs. *Fruits* all three connate and inseparable in one row, forming a transversely oval hard dry 3-chambered syncarp, crowned with the three small, densely hirsute discs and the persistent styles.

Hab. Cape Province. Cape Peninsula : in marshes on Muizenberg Mt. Plateau, and near Muizenberg Reservoir. Alt. 1,300—1,500 ft. Salter 3594 (type in Bolus Herbarium), 2948 ; Compton 16430 (nearly in fruit). Flowers September. (Co-types distributed to Kew and British Museum.)

Of the four hitherto recognised species of *Grubbia*, *G. tomentosa* (Thunb.) Harms (*G. stricta* A.DC.) alone shows distinctive floral characters, and in the remainder the differences, with the exception of slight variation in the bracts of the cymule, are almost entirely in the vegetative characters. *G. gracilis* is a much smaller and more slender species than its nearest affinities, *G. rosmarinifolia* Berg. and *G. pinifolia* Sond., from which it can be at once recognised by the narrow-obcuneate leaves with a sub-sagittate base. The syncarp in these species is remarkable, for the three 1-chambered ovaries of each cymule fuse together in a row in fruiting, into what appears to be, in the middle lateral section, an inseparable 3-chambered capsule.

Rafnia ericifolia Salter sp. nov. (Leguminosae-Papilionatae) §Eu-Rafnia.

Fruticulus parvus glaber, ad 20 cm. altus, ramis numerosis adscendentibus vel diffusis, habitu tholiformi. *Folia* sessilia linearia, plerumque 5—8 mm. longa, 0·6 mm. lata. *Flores* pauci laterales uniflori flavi, plerumque ramulorum apices versus positi. *Pedunculi* semi-reflexi. *Calycis* lobi, lanceolati, tubo obconico fere in longitudine aequantes, posterior angustior. *Petala* in longitudine fere aequantia : *vexilli* lamina ovata acuta carinata : *carina* rostrata. *Ovarium* 4-ovulatum. *Legumen* planum, ad 2·3 cm. longum, 4·5 mm. latum, reflexum, subglaucum.

A small, rather compact glabrous shrublet, dome-shaped in habit, up to about 20 cm. high, with numerous ascending or spreading branches. *Leaves* ascending to erect, imbricate, sessile, linear, obtuse, mostly 5—8 mm. long, about 0·6 mm. broad, the median vein prominent above : margins sometimes slightly revolute. *Flowers* few, lateral, mostly near the apex of the branchlets. *Peduncles* 1-flowered, semi-reflexed, swollen at the apex. *Bract* filiform, scarcely 1 mm. long : bracteoles minute, 0·4 mm. long, near the base of the peduncle. *Calyx* about 7 mm. long, the tube subobconic : lobes as long as the tube, more or less lanceolate, the posterior narrower than the remainder. *Petals* yellow, subequal in length : *vexillum* about 1 cm. long, the lamina ovate, acute, keeled, 5 times as long as the curved claw : lamina of the *alae* obliquely lanceolate : *carina* rostrate, subacute, somewhat incurved, sparsely pilose. *Antthers* alternately globose and lanceolate, the latter sterile. *Ovary* about 5 mm. long, 1 mm. broad, 4 ovuled : style 6·5 mm. long, inflexed, the stigma minute. Pod about 2·3 cm. long, 4·5 mm. broad, flat, reflexed, somewhat glaucous.

Hab. Cape Province. Cape Division : near Hercules Pillar, Salter 6567 (*type* in Bolus Herbarium) and Salter 4346. Flowering Jan.—Mch.

Also observed (not in flower) south of Paarl Berg. (*Co-types* distributed to Kew and the British Museum.)

This species has no near affinity: it can be at once distinguished by its dwarf habit and small ericoid leaves. Apparently it never flowers very profusely.